

PTFE 3M SAMPLE CARD TRANSMISSION SPECTRUM (TOP)
AND ABSORBANCE SPECTRUM (BOTTOM)

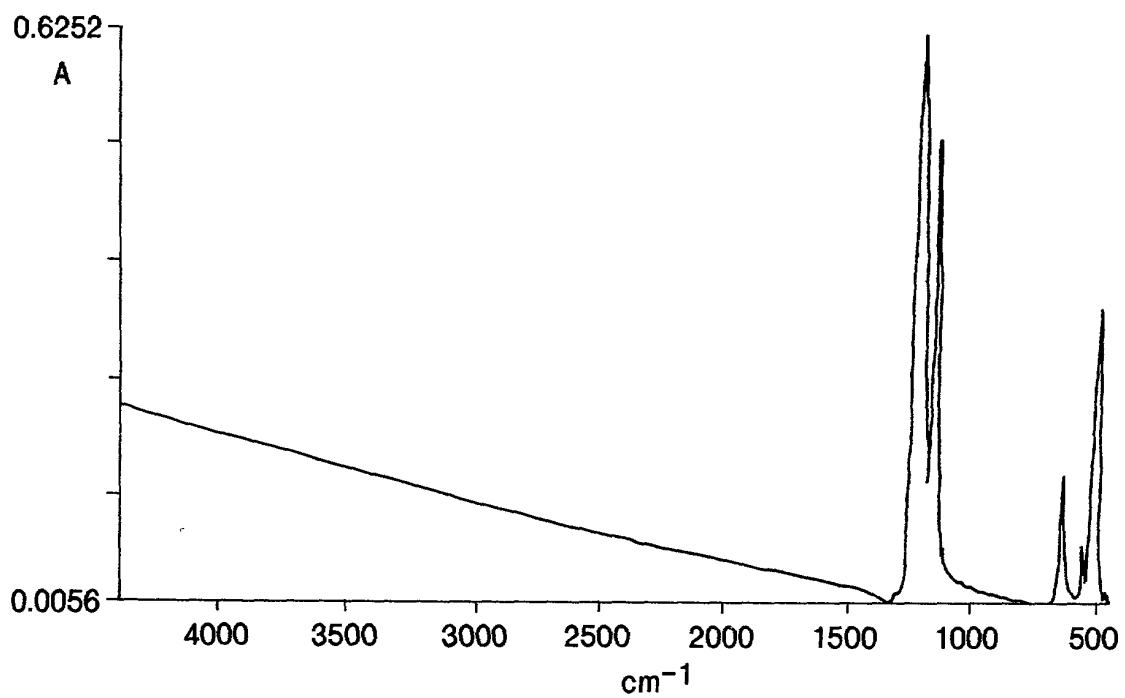
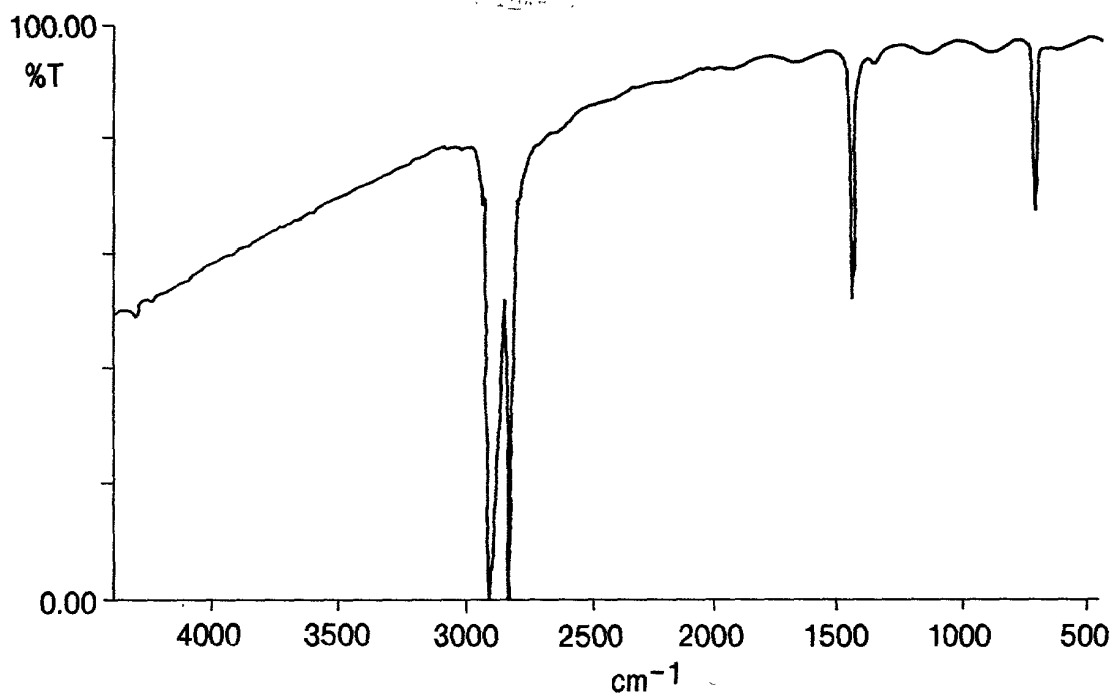


FIG. 1



POLYETHYLENE 3M SAMPLE CARD TRANSMISSION SPECTRUM (TOP)
AND ABSORBANCE SPECTRUM (BOTTOM)

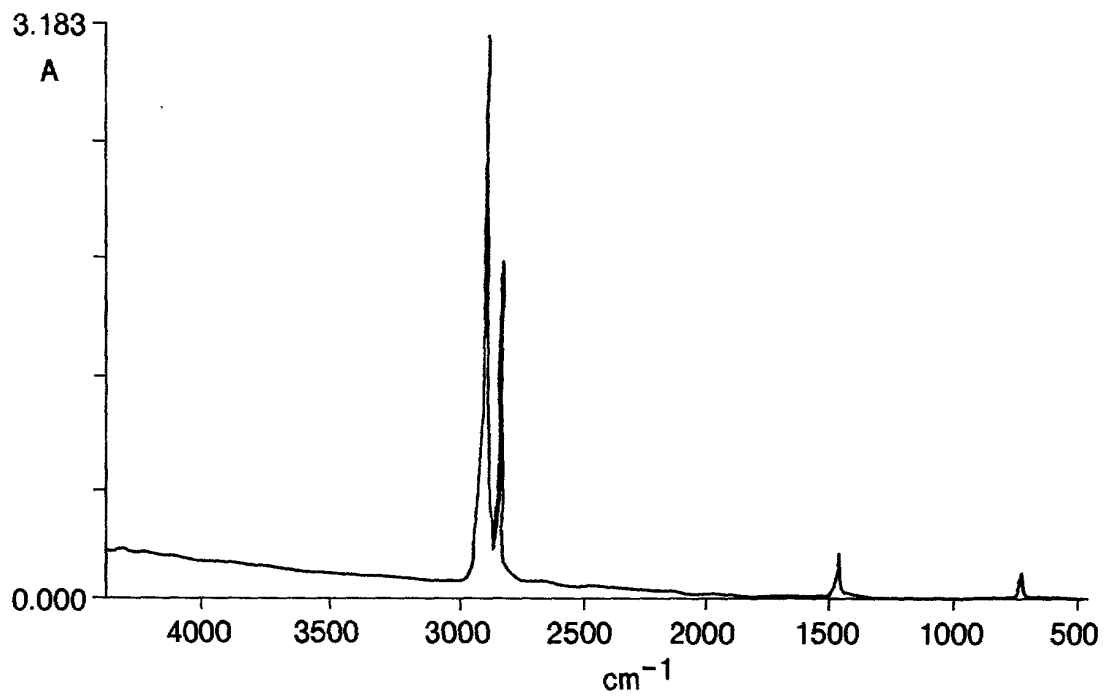
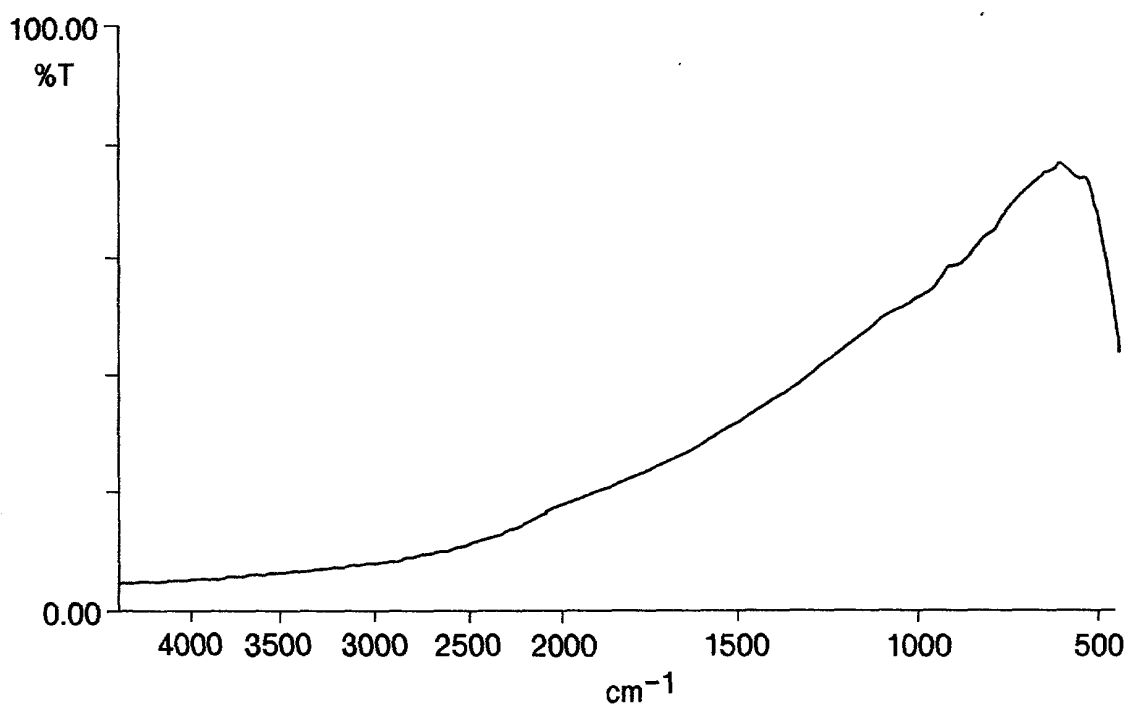
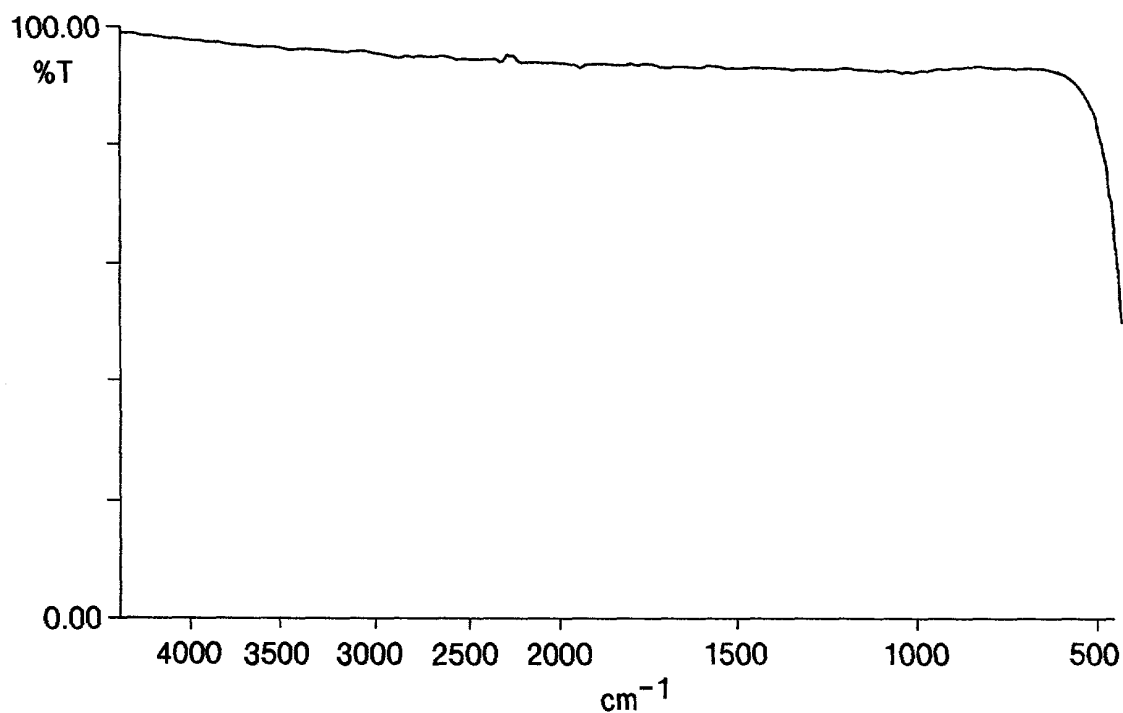


FIG. 2



SPECTRUM KCL CRYSTAL BLANK, UNPOLISHED

FIG. 3A



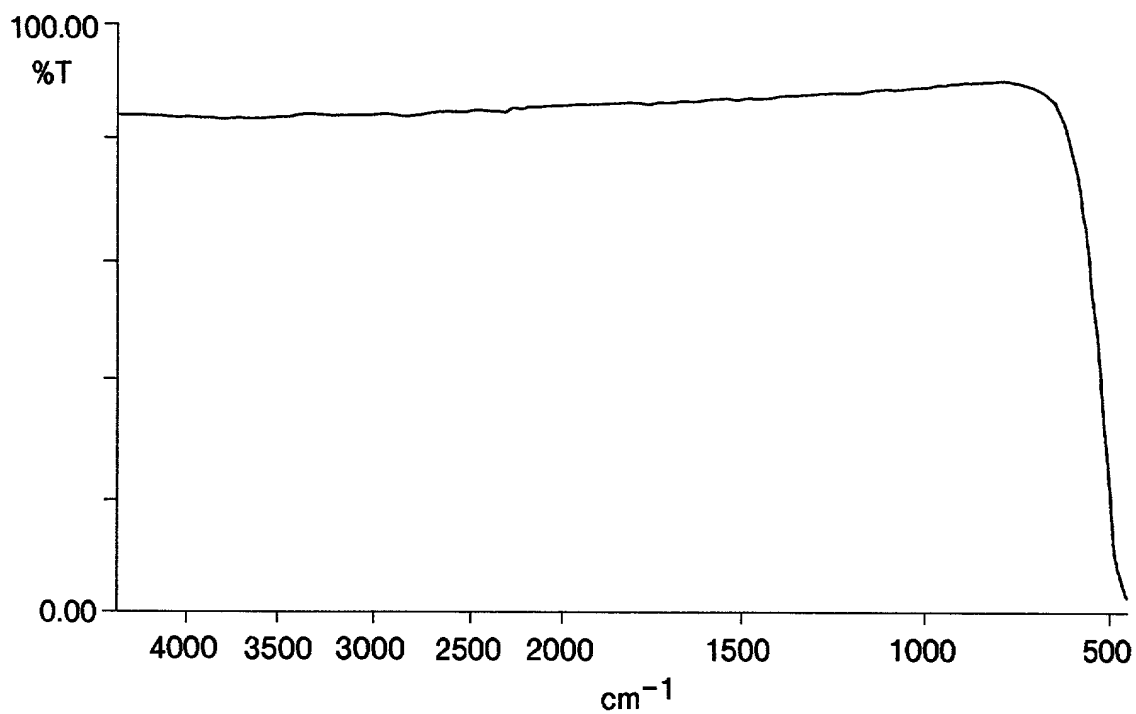
SPECTRUM KCL CRYSTAL BLANK, WATER POLISHED

FIG. 3B

The infrared spectrum of 2,4-dinitrophenol shows a broad absorption band around 3400 cm⁻¹, characteristic of the phenolic OH group. Sharp peaks are observed at approximately 1520 cm⁻¹ and 1340 cm⁻¹, corresponding to the nitro group vibrations. The x-axis represents the wavenumber in cm⁻¹, ranging from 4000 to 500, and the y-axis represents the percentage of transmittance (%T), ranging from 0.00 to 100.00.

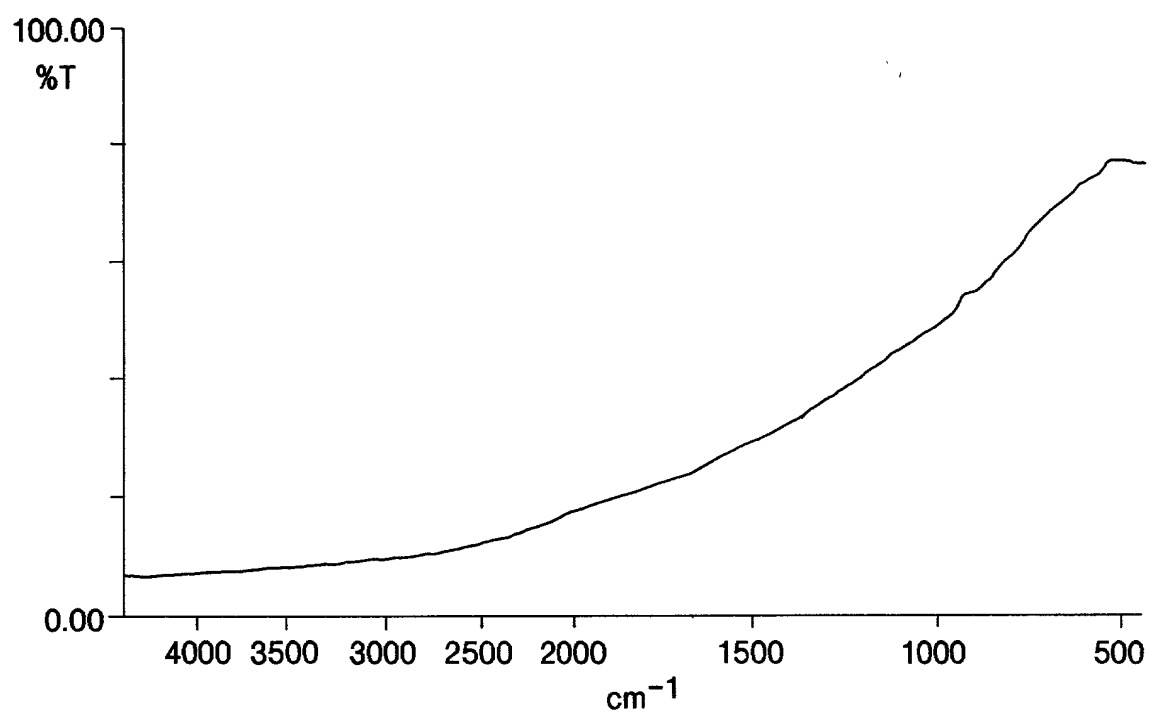
SPECTRUM NaCl CRYSTAL BLANK, UNPOLISHED

FIG. 4A



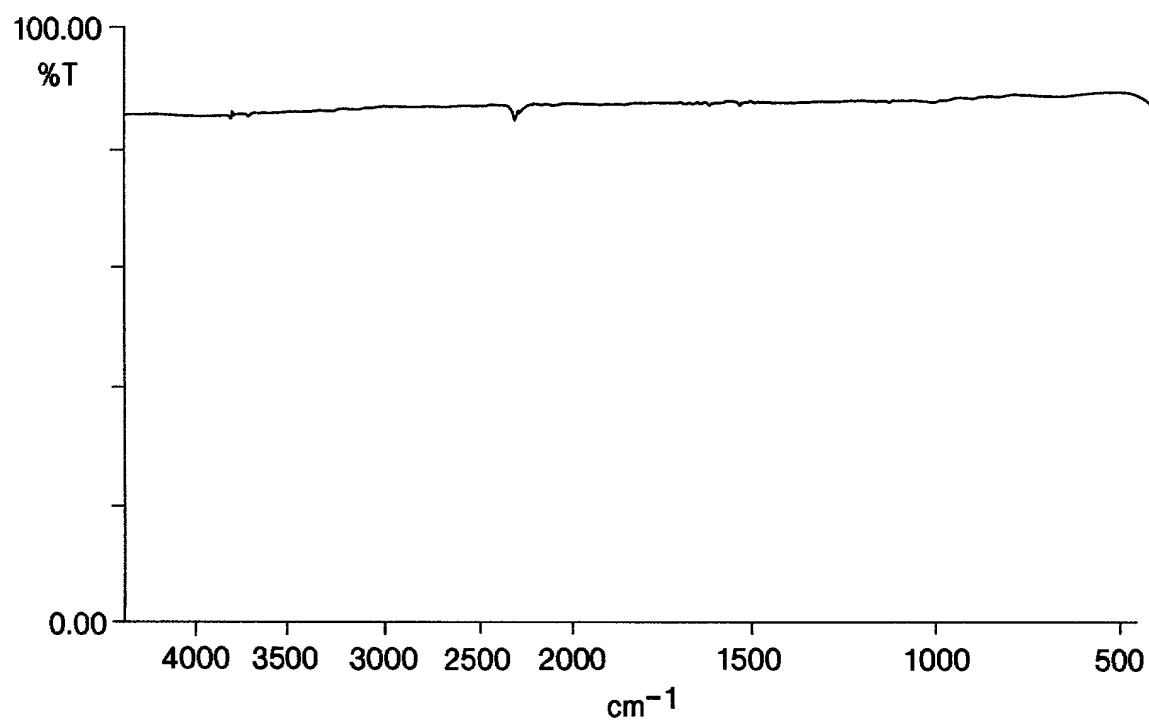
SPECTRUM NaCl CRYSTAL BLANK, WATER POLISHED

FIG. 4B



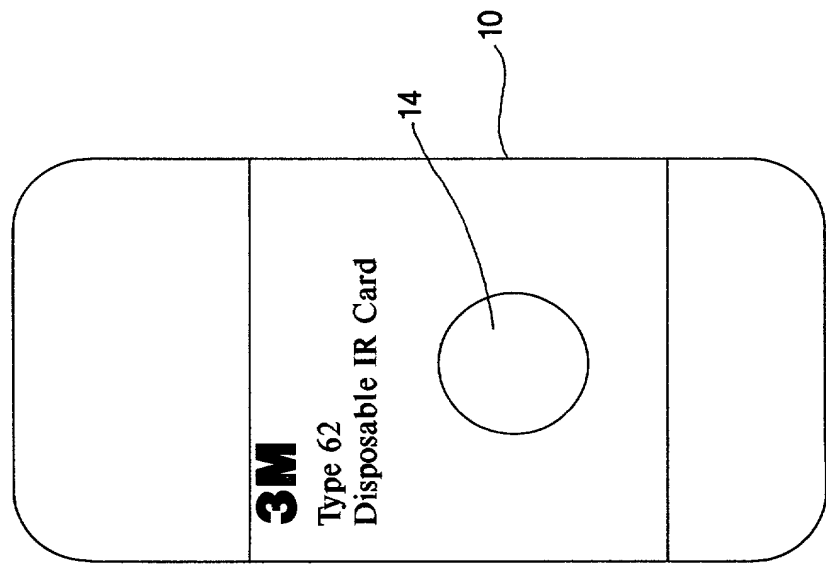
SPECTRUM KBR CRYSTAL BLANK, UNPOLISHED

FIG. 5A



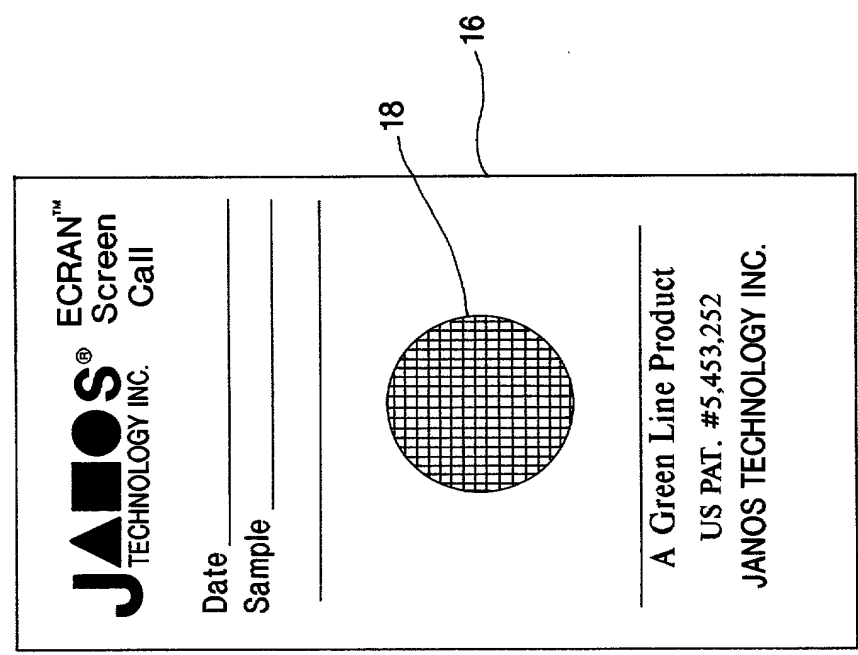
SPECTRUM KBR CRYSTAL BLANK, WATER POLISHED

FIG. 5B



3M SAMPLE CARD---PTFE

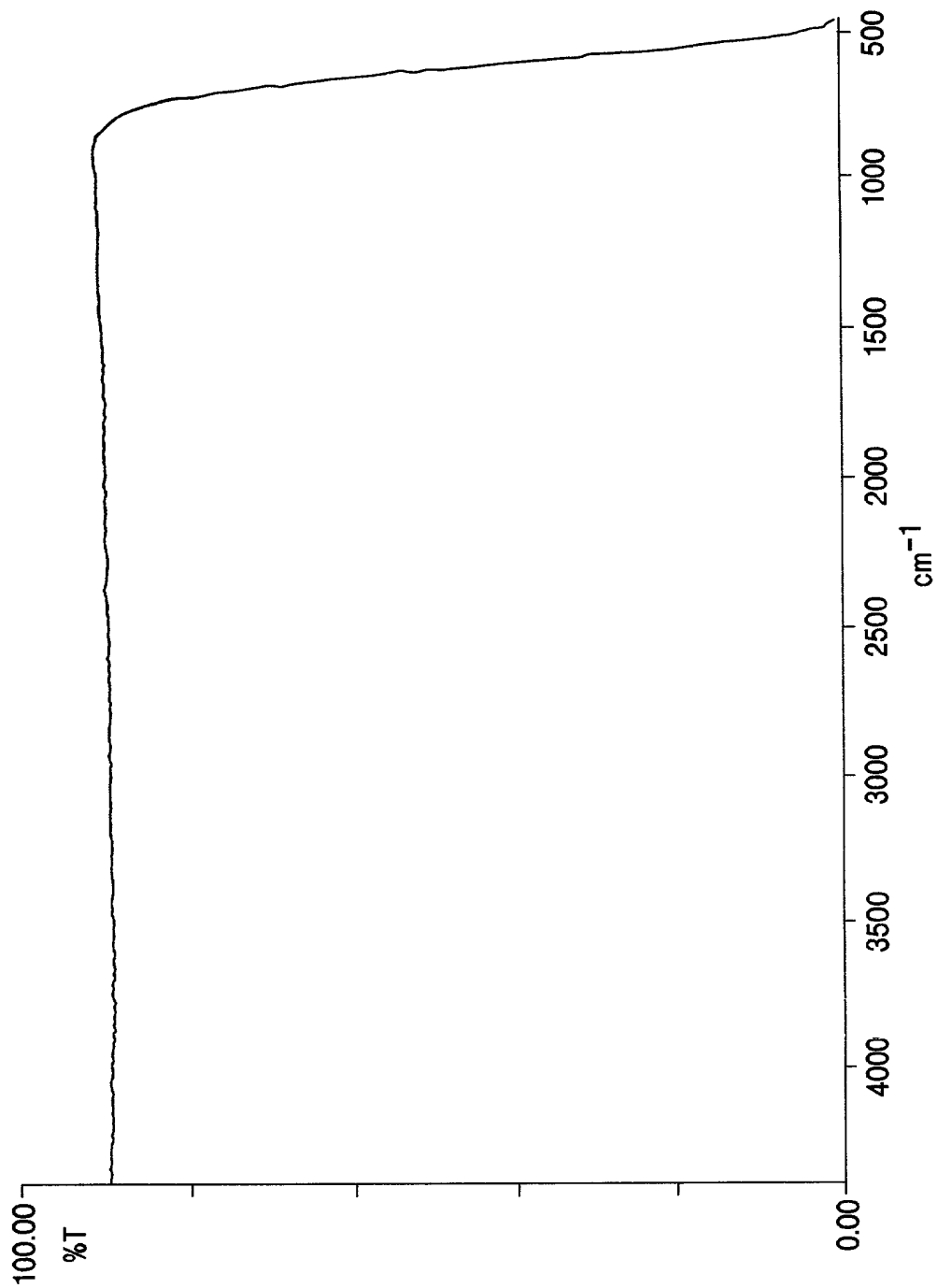
FIG. 6



JANOS SCREEN CARD

FIG. 7

20750-494463



SPECTRUM OF CLEAVED NaCl CRYSTAL SAMPLE
SUPPORT MOUNTED IN 19MM APERTURE
SAMPLE CARD

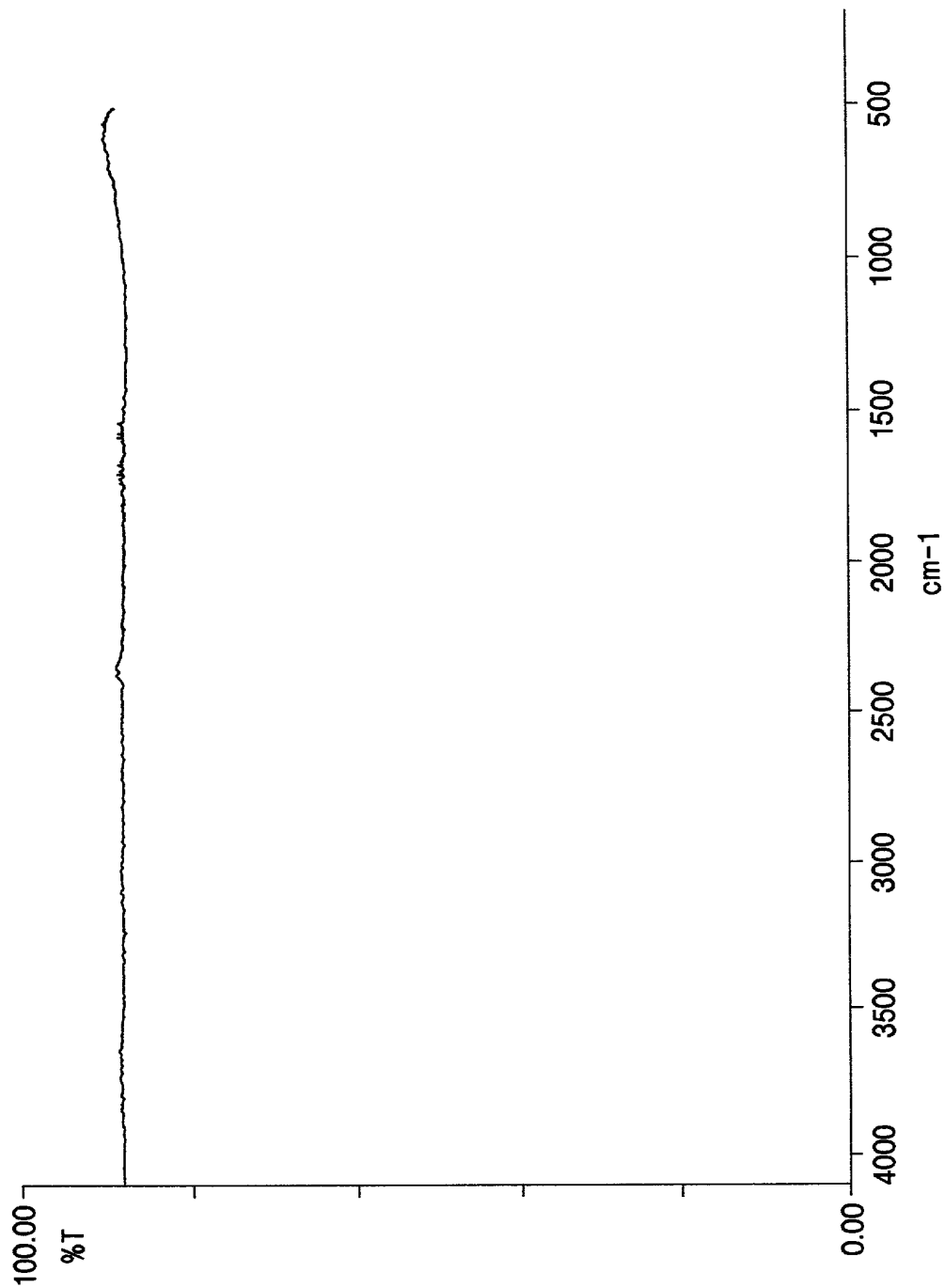
FIG. 8

The infrared spectrum of polyacetylene shows a broad absorption band centered around 3300 cm^{-1} , characteristic of the C-H stretching in the CH_2 groups. A sharp, intense peak is observed at approximately 2100 cm^{-1} , corresponding to the $\text{C}\equiv\text{C}$ stretching vibration. Another sharp peak is visible at approximately 2260 cm^{-1} , which is also associated with the $\text{C}\equiv\text{C}$ stretching. The baseline is relatively flat across the rest of the spectrum, indicating a high degree of purity and crystallinity.

**SPECTRUM OF CLEAVED KCL CRYSTAL SAMPLE
SUPPORT MOUNTED IN 19MM APERTURE
SAMPLE CARD**

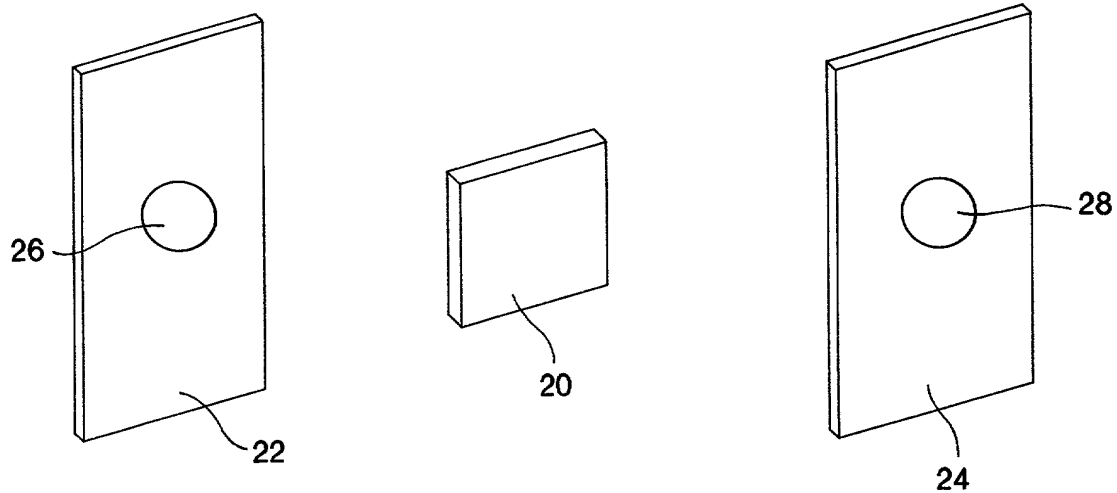
FIG. 9

REF ID: A92259



SPECTRUM OF CLEAVED KBr CRYSTAL SAMPLE
SUPPORT MOUNTED IN 19MM APERTURE
SAMPLE CARD

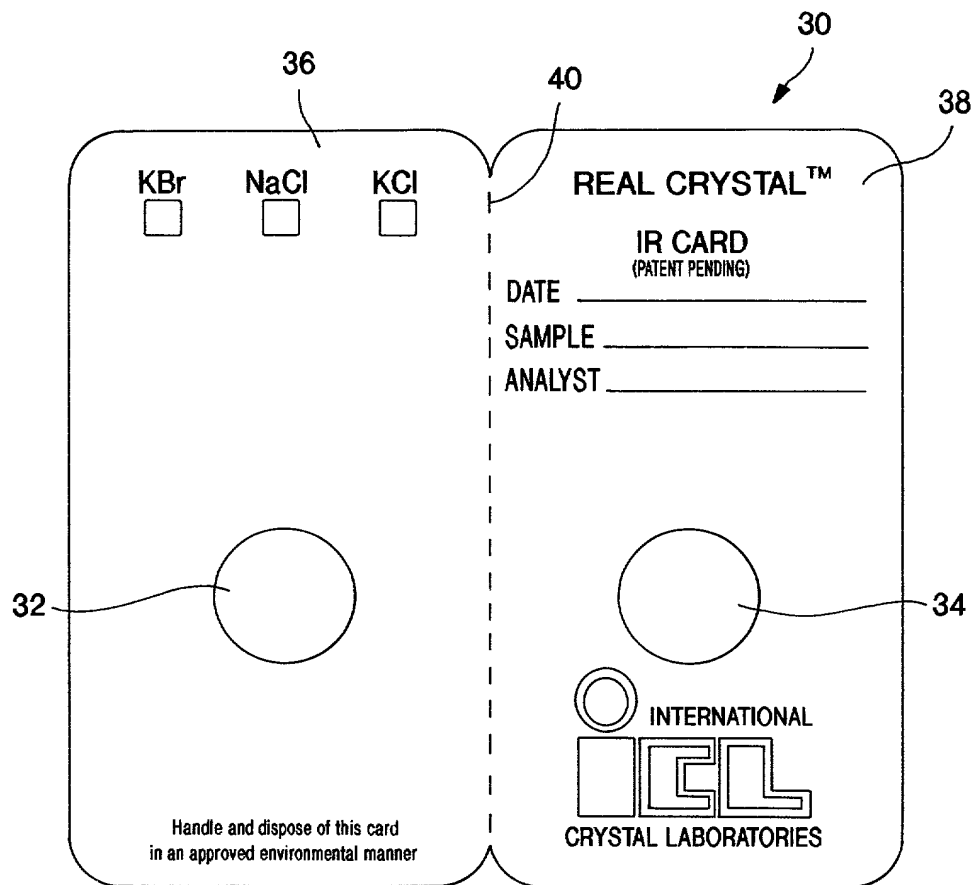
FIG. 10



EXPLODED VIEW OF SAMPLE CARD WITH CLEAVED
CRYSTAL WINDOW AS SAMPLE SUPPORT

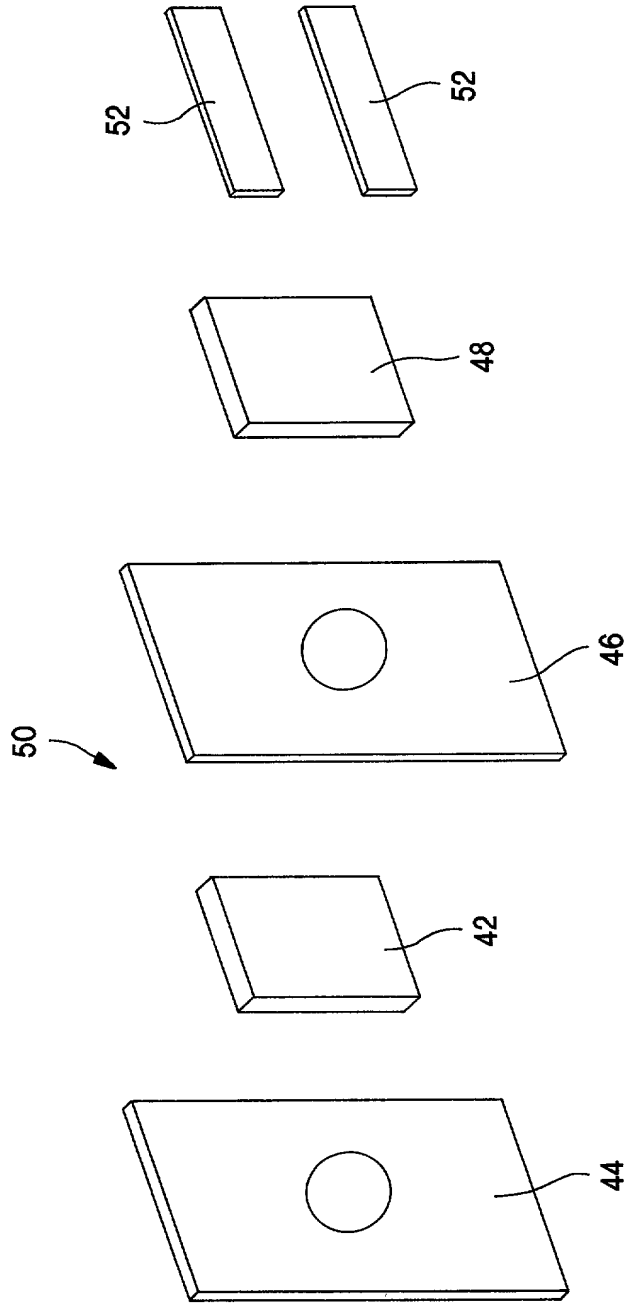
FIG. 11

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SAMPLE CARD FRAME WITH 2 APERTURES FOR FOLD OVER
SANDWICHING OF SAMPLE SUPPORT WINDOW

FIG. 12



EXPLODED VIEW OF SAMPLE CARD WITH CLEAVED CRYSTAL
AS SAMPLE SUPPORT AND WITH SECOND COVER WINDOW

FIG. 13

The diagram illustrates a laser interferometer setup. An incident beam 74 enters from the left, passing through a lens 72. The beam is split by a beam splitter 70 into two paths. One path is reflected by mirror 78, and the other path is reflected by mirror 76. The two beams recombine at the beam splitter 70 and are directed towards a detector 80. The angle of incidence is labeled θ . The sample card 75 is positioned between the beam splitter 70 and mirror 78.

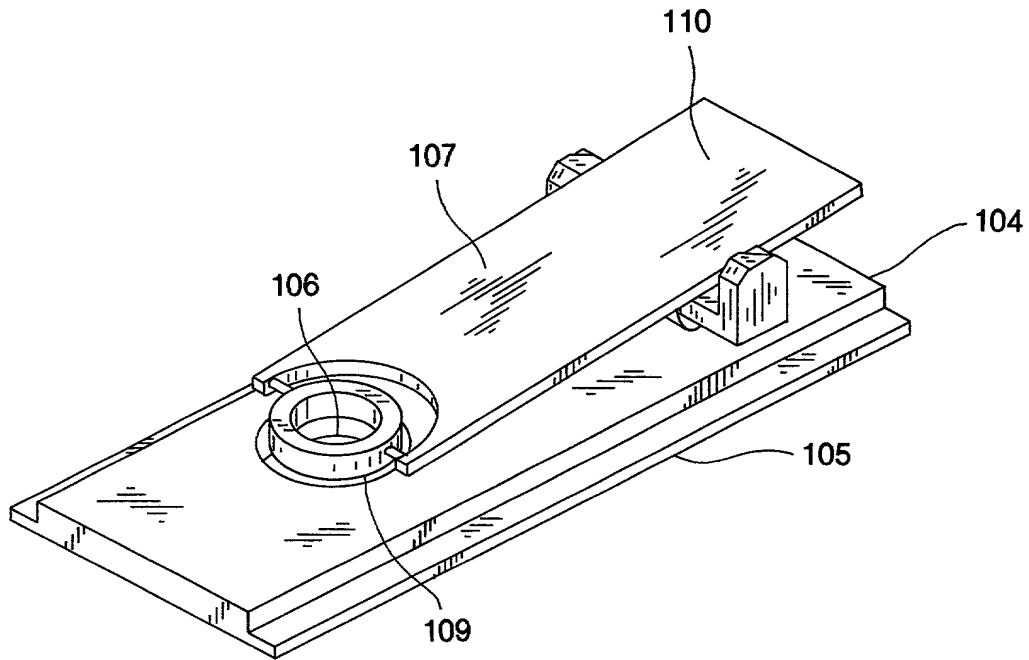


FIG. 16

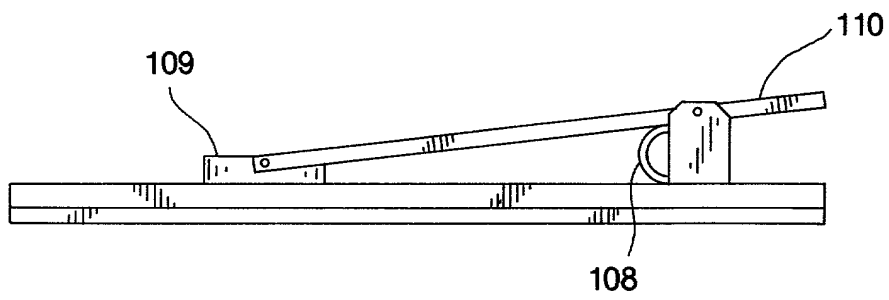


FIG. 17

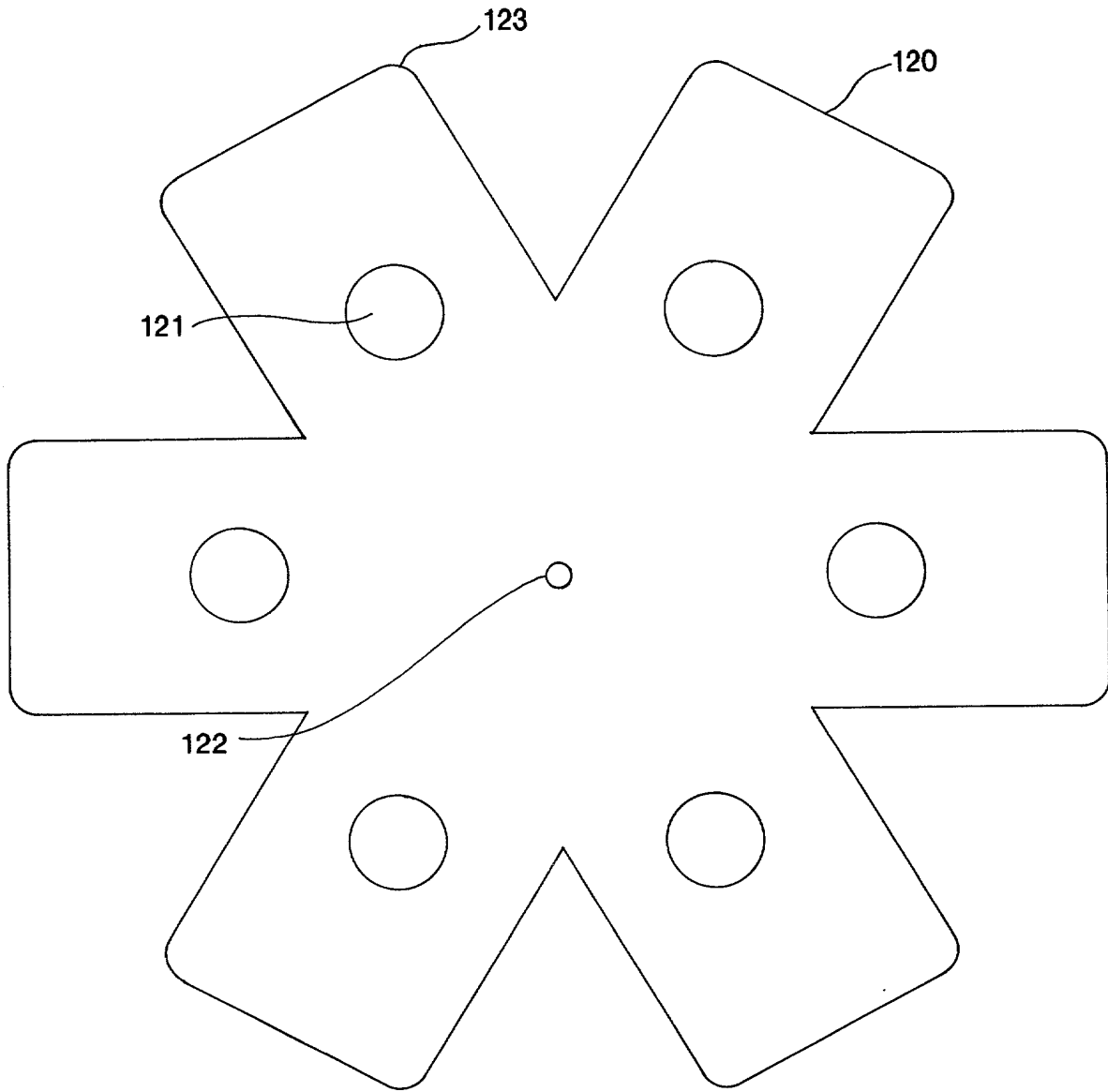


FIG. 18